



IDLEWILD LAKE – 2006 FISHERIES SURVEY REPORT

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Idlewild Lake is a 105-acre lake in Yates Township, three miles east of the village of Baldwin, in southern Lake County, Michigan. The lake is within the Pere Marquette River watershed, with no inlets or outlets. The deepest point in Idlewild Lake is about 22 feet, with roughly 70% of the lake shallower than 15 feet. The first recorded stocking of Idlewild Lake occurred in 1931, when 3,000 bluegills were stocked by the Michigan Department of Conservation (the precursor to today's Michigan Department of Natural Resources). Other fish stockings of Idlewild Lake include yellow perch fingerlings stocked in 1953 and 1954, and northern pike fingerlings stocked in 1978. Idlewild Lake has a very good reputation for producing good catches of largemouth bass, bluegill, and northern pike. Access to Idlewild Lake is available at a boat launch on the north side of the lake. The launch is administered by Yates Township.

The first fisheries survey of Idlewild Lake was conducted by the Michigan Department of Conservation in 1953 (Taube, 1953). In that survey, species captured included largemouth bass, smallmouth bass, bluegill, white sucker, and bluntnose minnow. The 1953 survey included the use of gill nets and seines. Subsequent fisheries surveys were conducted in 1960, 1976, and 1995. The 1960 survey was only a seining effort, with relatively few species caught, including largemouth bass, smallmouth bass, bluegill, and carp. Bullen (1972) reported that Idlewild Lake was one of the best smallmouth bass lakes in Lake County. The 1976 survey used inland gill nets and trap nets, and species caught included smallmouth bass, largemouth bass, bluegill, yellow perch, white sucker, carp, and yellow bullhead. In 1995, new species caught included rock bass, northern pike, black crappie, and green sunfish. In the 1995 survey, bluegill, yellow perch, and northern pike were all growing below the State of Michigan average length-at-age. Despite this, some individuals were surviving long enough to reach large "catchable" sizes (Hay, 1995).

The most recent fisheries netting survey of Idlewild Lake took place in 2006. Idlewild Lake was selected as a random lake in the Lakes Status and Trends program. The survey included the use of trap nets, fyke nets, inland gill nets, one minnow seine, and electrofishing. The netting portion of the survey was conducted from May 16, 2006 to May 18, 2006, and electrofishing was conducted on August 29, 2006. A total of 1,058 fish representing ten species were caught in the 2006 survey. Bluegill were the most common species in the catch, with 711 bluegill ranging from 1-9" caught. About 38% of the bluegill caught in the survey exceeded 6", with over 200 exceeding 7" in length. Growth for the bluegill caught in the netting portion of the survey was near the state average, but growth for those caught during the electrofishing portion of the survey was well below the state average. This was likely due to the high number of small (3-5") bluegill caught during electrofishing. Other panfish species were well-represented in the catch, including rock bass, black crappie, and yellow perch. Largemouth bass and northern pike were the two predator species present in the catch of the 2006 survey. Largemouth bass were very abundant, with 88 individuals caught, ranging from 2-17" in length. Only 8% of the largemouth bass caught exceeded the minimum legal size of 14". Growth for largemouth bass was poor, at over two inches below the State of Michigan average length-at-age for those caught during the netting portion of the survey. Twenty-seven northern pike were caught in the 2006 survey, ranging from 8-33" in length. Of those, 33% exceeded the minimum legal size limit of 24". Growth for northern pike was slightly below the state average. Other species caught in the 2006 survey included bluntnose minnow, green sunfish, and yellow bullhead.

Limnological sampling of Idlewild Lake took place on 8/14/2006. Water temperatures ranged from 75.7f at the surface to 65.41f at the bottom in 20' of water. Secchi depth was 9 feet. Due to its relatively shallow nature, Idlewild Lake does not completely stratify. Dissolved oxygen levels dropped from nearly 10 ppm at the surface to 4.43 ppm at the bottom in 20 feet of water, but 4.43 ppm is still sufficient to support most fish species and other aquatic life.

Conclusions

1. The Idlewild Lake bluegill population is outstanding, with many fish in the 6-9" range. Although bluegill growth is poor for younger age classes, once the bluegill reach age-5, they begin to grow faster. The black crappie population also appears to be in good shape, exhibiting fair growth and good population size structure.



2. The largemouth bass population of Idlewild Lake is clearly stunted, exhibiting very slow growth and a poor size structure. However, largemouth bass are very abundant in Idlewild Lake and they offer a good catch and release angling opportunity.
3. The northern pike population of Idlewild Lake is in very good shape. Eight different year classes were represented in the survey, so natural reproduction is occurring in all or most years. Although northern pike were growing somewhat slower than the state average, it was better in the 2006 survey than in the 1995 survey. Idlewild Lake has a reputation as one of the best northern pike fishing lakes in Lake County.

Management Direction

1. Idlewild Lake should be managed for its native species like bluegill, black crappie, largemouth bass, and northern pike. These species should be able to support themselves through natural reproduction. Idlewild Lake provides an excellent fishing experience for largemouth bass, northern pike, and panfish.
2. Any remaining riparian wetlands on Idlewild Lake should be protected with the utmost diligence. Wetlands are critical fisheries habitat, especially for northern pike spawning and rearing.

References:

Bullen, W. H. 1972. Preliminary habitat improvement report, Idlewild Lake, Lake County. Michigan Department of Natural Resources, Cadillac.

Hay, R. L. 1995. Lake surveys: Idlewild Lake, 1995. Michigan Department of Natural Resources, Cadillac.

Taube, C. M., and Crowe, W. R. 1953. Results of fishery investigations made on fourteen lakes in Lake County. Michigan Department of Conservation, Institute of Fisheries Research Report No. 1389, Ann Arbor.



Water: Idlewild Lake
Survey begin: 05/16/2006 end: 08/29/2006
Survey type: Inland Lake
Primary purpose: Status & Trends

Discharge county: Lake
T/R/S: 17N 12W 05
Status: Field Work Complete

Note: Random Status and Trends survey of general fish population. Size medium.

Gear: No. used	Gear	Common name
1	Boom Shocker	18 KD Boomshocker
1	EGill In HAR-11	EGill In HAR-11
1	EGill In HAR-17	EGill In HAR-17
1	Fyke LM HAR-07	Fyke LM HAR-07
	Limnology	
1	Minnow Seine	Status & Trends minnow seine
	Other	
1	Trap Net	Trap Net HAR - 12
		Trap Net HAR - 10
		Trap Net HAR-11
		Trap Net HAR - 09

Species	Number	Percent by number	Weight (lb.)	Percent by weight	Length range (in.)*	Average length (in.)	Percent legal size**
Black crappie	47	4.4	17.0	6.2	6-11		87
GNHAR17 effort 1 Net Nights	1	0.1	0.3	0.1	8-8	8.5	100
FNLHA07 effort 1 Net Nights	3	0.3	1.3	0.5	8-9	9.2	100
TRAPNET effort 1 Net Nights	5	0.5	2.4	0.9	7-11	9.3	100
TRAPNET effort 1 Net Nights	1	0.1	0.1	0.1	6-6	6.5	0
TRAPNET effort 1 Net Nights	9	0.9	2.9	1.1	7-10	8.3	100
TRAPNET effort 1 Net Nights	11	1.0	4.4	1.6	6-11	8.8	91
TRAPNET effort 1 Net Nights	5	0.5	2.3	0.9	7-10	9.3	100
TRAPNET effort 1 Net Nights	1	0.1	0.2	0.1	7-7	7.5	100
TRAPNET effort 1 Net Nights	2	0.2	0.3	0.1	6-6	6.5	0
TRAPNET effort 1 Net Nights	5	0.5	1.5	0.5	6-9	8.1	80
TRAPNET effort 1 Net Nights	2	0.2	0.6	0.2	6-9	8.0	50
TRAPNET effort 1 Net Nights	2	0.2	0.7	0.3	7-9	8.5	100
Bluegill	711	67.2	106.3	38.8	1-9		38
FNLHA07 effort 1 Net Nights	32	3.0	8.3	3.0	5-9	7.0	75
TRAPNET effort 1 Net Nights	38	3.6	10.3	3.8	5-9	7.1	79
TRAPNET effort 1 Net Nights	51	4.8	18.1	6.6	6-8	7.9	100
TRAPNET effort 1 Net Nights	7	0.7	2.0	0.7	6-8	7.4	100
TRAPNET effort 1 Net Nights	16	1.5	5.5	2.0	6-8	7.8	100
GNHAR17 effort 1 Net Nights	1	0.1	0.2	0.1	6-6	6.5	100
FNLHA07 effort 1 Net Nights	24	2.3	8.2	3.0	5-9	7.7	92



Species	Number	Percent by number	Weight (lb.)	Percent by weight	Length range (in.)*	Average length (in.)	Percent legal size**
Bluegill	711	67.2	106.3	38.8	1-9		38
TRAPNET effort 1 Net Nights	2	0.2	0.7	0.3	7-8	8.0	100
TRAPNET effort 1 Net Nights	17	1.6	5.2	1.9	6-8	7.5	100
TRAPNET effort 1 Net Nights	3	0.3	0.8	0.3	6-8	7.2	100
TRAPNET effort 1 Net Nights	20	1.9	6.1	2.2	5-8	7.5	90
GNHAR11 effort 1 Net Nights	1	0.1	0.1	0.0	4-4	4.5	0
FNLHA07 effort 1 Net Nights	6	0.6	2.5	0.9	7-8	8.3	100
TRAPNET effort 1 Net Nights	23	2.2	7.6	2.8	5-8	7.6	87
TRAPNET effort 1 Net Nights	13	1.2	3.4	1.3	5-8	7.1	92
TRAPNET effort 1 Net Nights	7	0.7	1.5	0.5	5-8	6.5	57
TRAPNET effort 1 Net Nights	31	2.9	11.0	4.0	5-8	7.8	90
SEINEMW effort 1 Hauls 25 Feet	30	2.8	0.4	0.1	1-4	2.6	0
SEINEMW effort 1 Hauls 25 Feet	3	0.3	0.0	0.0	1-2	2.2	0
SEINEMW effort 1 Hauls 25 Feet	7	0.7	0.0	0.0	1-1	1.5	0
SEINEMW effort 1 Hauls 25 Feet	2	0.2	0.1	0.0	3-3	3.5	0
BOOMSHK effort 600 Seconds	66	6.2	2.2	0.8	1-5	3.4	0
BOOMSHK effort 600 Seconds	150	14.2	6.0	2.2	1-7	3.5	4
BOOMSHK effort 600 Seconds	161	15.2	5.9	2.2	1-6	3.5	3
Bluntnose minnow	77	7.3	0.6	0.2	1-4		100
SEINEMW effort 1 Hauls 25 Feet	29	2.7	0.2	0.1	1-3	2.5	100
SEINEMW effort 1 Hauls 25 Feet	1	0.1	0.0	0.0	1-1	1.5	100
SEINEMW effort 1 Hauls 25 Feet	16	1.5	0.1	0.0	1-2	2.3	100
BOOMSHK effort 600 Seconds	12	1.1	0.1	0.0	1-3	2.6	100
BOOMSHK effort 600 Seconds	14	1.3	0.3	0.1	2-4	3.5	100
BOOMSHK effort 600 Seconds	5	0.5	0.0	0.0	2-2	2.5	100
Green sunfish	2	0.2	0.0	0.0	2-3		0
SEINEMW effort 1 Hauls 25 Feet	1	0.1	0.0	0.0	3-3	3.5	0
BOOMSHK effort 600 Seconds	1	0.1	0.0	0.0	2-2	2.5	0
Largemouth bass	88	8.3	36.8	13.4	2-17		8
FNLHA07 effort 1 Net Nights	1	0.1	0.6	0.2	10-10	10.5	0
TRAPNET effort 1 Net Nights	4	0.4	2.6	0.9	8-13	10.5	0
TRAPNET effort 1 Net Nights	7	0.7	3.5	1.3	7-11	9.8	0
TRAPNET effort 1 Net Nights	1	0.1	0.8	0.3	11-11	11.5	0
TRAPNET effort 1 Net Nights	5	0.5	8.4	3.1	13-15	14.7	80
FNLHA07 effort 1 Net Nights	2	0.2	0.9	0.3	9-9	9.5	0
TRAPNET effort 1 Net Nights	1	0.1	2.9	1.0	17-17	17.5	100
TRAPNET effort 1 Net Nights	1	0.1	1.0	0.4	12-12	12.5	0
TRAPNET effort 1 Net Nights	1	0.1	0.3	0.1	8-8	8.5	0
FNLHA07 effort 1 Net Nights	2	0.2	1.3	0.5	8-12	10.5	0



Fish Collection System

Produced: March 28, 2007

Species	Number	Percent by number	Weight (lb.)	Percent by weight	Length range (in.)*	Average length (in.)	Percent legal size**
Largemouth bass	88	8.3	36.8	13.4	2-17		8
TRAPNET effort 1 Net Nights	1	0.1	0.3	0.1	8-8	8.5	0
TRAPNET effort 1 Net Nights	1	0.1	0.3	0.1	8-8	8.5	0
TRAPNET effort 1 Net Nights	2	0.2	1.9	0.7	10-13	12.0	0
SEINEMW effort 1 Hauls 25 Feet	5	0.5	0.1	0.0	2-4	3.7	0
SEINEMW effort 1 Hauls 25 Feet	1	0.1	0.0	0.0	2-2	2.5	0
SEINEMW effort 1 Hauls 25 Feet	1	0.1	0.0	0.0	2-2	2.5	0
BOOMSHK effort 600 Seconds	14	1.3	0.8	0.3	2-7	4.3	0
BOOMSHK effort 600 Seconds	17	1.6	2.6	1.0	2-12	4.7	0
BOOMSHK effort 600 Seconds	21	2.0	8.7	3.2	2-17	6.8	10
Northern pike	27	2.6	79.4	29.0	8-33		33
GNHAR17 effort 1 Net Nights	1	0.1	5.8	2.1	29-29	29.5	100
GNHAR11 effort 1 Net Nights	1	0.1	1.3	0.5	18-18	18.5	0
TRAPNET effort 1 Net Nights	1	0.1	1.9	0.7	20-20	20.5	0
TRAPNET effort 1 Net Nights	1	0.1	1.1	0.4	17-17	17.5	0
TRAPNET effort 1 Net Nights	3	0.3	10.9	4.0	19-30	24.5	33
GNHAR17 effort 1 Net Nights	3	0.3	4.9	1.8	14-21	19.2	0
GNHAR11 effort 1 Net Nights	1	0.1	1.3	0.5	18-18	18.5	0
FNLHA07 effort 1 Net Nights	1	0.1	1.3	0.5	18-18	18.5	0
TRAPNET effort 1 Net Nights	2	0.2	7.4	2.7	24-26	25.5	100
TRAPNET effort 1 Net Nights	1	0.1	8.7	3.2	33-33	33.5	100
GNHAR17 effort 1 Net Nights	2	0.2	3.0	1.1	17-20	19.0	0
GNHAR11 effort 1 Net Nights	2	0.2	2.8	1.0	11-22	17.0	0
TRAPNET effort 1 Net Nights	5	0.5	15.5	5.7	14-33	22.1	40
TRAPNET effort 1 Net Nights	2	0.2	13.3	4.9	27-33	30.5	100
BOOMSHK effort 600 Seconds	1	0.1	0.1	0.0	8-8	8.5	0
Rock bass	37	3.5	11.1	4.1	2-11		68
FNLHA07 effort 1 Net Nights	2	0.2	0.4	0.2	5-7	6.5	50
TRAPNET effort 1 Net Nights	3	0.3	2.0	0.7	6-10	9.2	100
TRAPNET effort 1 Net Nights	8	0.8	1.7	0.6	5-7	6.5	75
TRAPNET effort 1 Net Nights	1	0.1	0.2	0.1	6-6	6.5	100
TRAPNET effort 1 Net Nights	1	0.1	0.3	0.1	7-7	7.5	100
GNHAR17 effort 1 Net Nights	2	0.2	0.2	0.1	5-5	5.5	0
TRAPNET effort 1 Net Nights	3	0.3	0.6	0.2	5-7	6.5	67
TRAPNET effort 1 Net Nights	2	0.2	1.2	0.4	7-10	9.0	100
TRAPNET effort 1 Net Nights	4	0.4	2.0	0.7	5-11	8.3	75
TRAPNET effort 1 Net Nights	1	0.1	0.1	0.0	5-5	5.5	0
TRAPNET effort 1 Net Nights	2	0.2	1.2	0.4	7-10	9.0	100
BOOMSHK effort 600 Seconds	3	0.3	0.5	0.2	4-6	5.8	67
BOOMSHK effort 600 Seconds	3	0.3	0.3	0.1	2-6	4.5	33



Species	Number	Percent by number	Weight (lb.)	Percent by weight	Length range (in.)*	Average length (in.)	Percent legal size**
Rock bass	37	3.5	11.1	4.1	2-11		68
BOOMSHK effort 600 Seconds	2	0.2	0.4	0.1	4-7	6.0	50
Yellow Perch	37	3.5	1.8	0.7	2-12		3
GNHAR11 effort 1 Net Nights	1	0.1	0.9	0.3	12-12	12.5	100
GNHAR17 effort 1 Net Nights	2	0.2	0.2	0.1	6-6	6.5	0
GNHAR17 effort 1 Net Nights	1	0.1	0.1	0.0	6-6	6.5	0
SEINEMW effort 1 Hauls 25 Feet	2	0.2	0.0	0.0	2-3	3.0	0
BOOMSHK effort 600 Seconds	13	1.2	0.3	0.1	2-4	3.7	0
BOOMSHK effort 600 Seconds	14	1.3	0.2	0.1	2-4	3.5	0
BOOMSHK effort 600 Seconds	4	0.4	0.1	0.0	3-4	4.0	0
Yellow bullhead	32	3.0	20.5	7.5	8-13		100
TRAPNET effort 1 Net Nights	2	0.2	1.8	0.7	11-13	12.5	100
TRAPNET effort 1 Net Nights	6	0.6	3.6	1.3	8-12	10.7	100
TRAPNET effort 1 Net Nights	1	0.1	0.6	0.2	10-10	10.5	100
TRAPNET effort 1 Net Nights	6	0.6	4.0	1.5	8-12	11.2	100
TRAPNET effort 1 Net Nights	2	0.2	1.1	0.4	9-11	10.5	100
TRAPNET effort 1 Net Nights	6	0.6	3.4	1.2	8-11	10.5	100
TRAPNET effort 1 Net Nights	1	0.1	0.6	0.2	10-10	10.5	100
TRAPNET effort 1 Net Nights	2	0.2	1.6	0.6	11-12	12.0	100
TRAPNET effort 1 Net Nights	6	0.6	3.9	1.4	8-12	11.0	100
All species totals:	1,058		273.6				

* Note some fish may be measured to 0.1 inch, others to inch group: e.g., "5" = 5.0 to 5.9 inches; "12" = 12.0 to 12.9 inches; etc.

** Percent legal or acceptable size for angling.



Water: Idlewild Lake
Survey begin: 05/16/2006 end: 08/29/2006
Survey type: Inland Lake
Primary purpose: Status & Trends
Note: Random Status and Trends survey of general fish population. Size medium.

Discharge county: Lake

T/R/S: 17N 12W 05

Status: Field Work Complete

Species	Inch group	Number	Pounds	
Black crappie				
	6	6	A 0.84	C
	7	11	A 2.45	C
	8	14	A 4.65	C
	9	10	A 4.73	C
	10	4	A 2.61	C
	11	2	A 1.74	C
Species total:		47	17.02	
Bluegill				
	1	40	A 0.06	C
	2	122	A 1.12	C
	3	146	A 3.87	C
	4	78	A 4.58	C
	5	53	A 5.88	C
	6	51	A 9.64	C
	7	120	A 35.70	C
	8	97	A 42.89	C
	9	4	A 2.52	C
Species total:		711	106.26	
Bluntnose minnow				
	1	11	A 0.00	
	2	47	A 0.27	C
	3	18	A 0.31	C
	4	1	A 0.04	C
Species total:		77	0.62	
Green sunfish				
	2	1	A 0.01	C
	3	1	A 0.03	C
Species total:		2	0.04	
Largemouth bass				
	2	24	A 0.16	C
	3	7	A 0.14	C
	4	6	A 0.24	C
	5	6	A 0.46	C

A = Actual, C = Computed



Species	Inch group	Number		Pounds	
Largemouth bass					
	6	4	A	0.52	C
	7	2	A	0.40	C
	8	8	A	2.40	C
	9	7	A	2.97	C
	10	4	A	2.32	C
	11	6	A	4.62	C
	12	4	A	3.99	C
	13	3	A	3.81	C
	14	2	A	3.17	C
	15	3	A	5.86	C
	17	2	A	5.72	C
Species total:		88		36.78	
Northern pike					
	8	1	A	0.12	C
	11	1	A	0.30	C
	14	2	A	1.24	C
	17	3	A	3.39	C
	18	3	A	4.02	C
	19	1	A	1.58	C
	20	3	A	5.55	C
	21	2	A	4.30	C
	22	1	A	2.48	C
	23	1	A	2.85	C
	24	2	A	6.48	C
	26	1	A	4.15	C
	27	1	A	4.66	C
	29	1	A	5.81	C
	30	1	A	6.46	C
	33	3	A	26.01	C
Species total:		27		79.40	
Rock bass					
	2	1	A	0.01	C
	4	3	A	0.21	C
	5	8	A	0.96	C
	6	10	A	2.01	C
	7	9	A	2.80	C
	8	1	A	0.46	C
	10	4	A	3.49	C
	11	1	A	1.15	C
Species total:		37		11.09	

A = Actual, C = Computed



Fish Collection System

Produced: March 28, 2007

Species	Inch group	Number		Pounds	
Yellow Perch					
	2	4	A	0.03	C
	3	21	A	0.33	C
	4	8	A	0.27	C
	6	3	A	0.33	C
	12	1	A	0.88	C
Species total:		37		1.84	
Yellow bullhead					
	8	4	A	1.20	C
	9	1	A	0.41	C
	10	9	A	4.93	C
	11	13	A	9.23	C
	12	4	A	3.60	C
	13	1	A	1.13	C
Species total:		32		20.50	
Grand total:		1058		273.55	

A = Actual, C = Computed



Water: Idlewild Lake

Discharge county: Lake

Survey begin: 05/16/2006

end: 08/29/2006

T/R/S: 17N 12W 05

Survey type: Inland Lake

Status: Field Work Completed

Primary purpose: Status & Trends

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Gear: No. used	Gear	Common name
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1	Fyke LM HAR-07	Fyke LM HAR-07
	Limnology	
1	Minnow Seine	Status & Trends minnow seine
	Other	
1	Trap Net	Trap Net HAR - 12
		Trap Net HAR - 10
		Trap Net HAR-11
		Trap Net HAR - 09

Species / Age	No. aged	Length range (in.)	State avg. length (in.)	Weighted mean len. (in.)	Weighted age freq.	Mean growth index*
Black crappie						-0.5
Age III:	3	6.1-6.8	7.5	6.50	6.38%	
Age IV:	20	6.5-9.8	8.6	7.89	47.52%	
Age V:	16	7.8-11.8	9.4	9.11	39.48%	
Age VI:	3	9.4-10.3	10.2	9.88	6.62%	
Bluegill						-0.5
Age III:	1	4.3-4.3	5.0	4.30	19.35%	
Age V:	15	5-7.1	6.7	5.98	19.00%	
Age VI:	3	6.7-7.1	7.3	6.89	4.82%	
Age VII:	13	6.1-8	7.8	7.41	24.34%	
Age VIII:	9	6.2-9	8.2	7.94	20.42%	
Age IX:	7	7.6-9	8.6	8.14	12.06%	
Largemouth bass						-2.1
Age II:	3	7.9-8.2	7.1	8.01	11.38%	
Age III:	2	8.4-9.2	9.4	8.81	6.67%	
Age IV:	9	8.3-10.1	11.6	9.33	28.29%	
Age V:	5	10.2-12.5	13.2	11.24	19.51%	
Age VI:	6	11.3-14.7	14.7	12.78	19.51%	
Age VII:	2	14.8-15.6	16.3	15.28	6.10%	
Age VIII:	1	17.1-17.1	17.4	17.10	4.88%	
Age IX:	1	15.6-15.6	18.3	15.60	3.66%	
Northern pike						-0.9
Age I:	1	11.2-11.2	11.7	11.20	4.00%	
Age II:	2	14.1-14.2	17.7	14.15	8.00%	

* Mean growth index is the average deviation from the state average length at age.



Species / Age	No. aged	Length range (in.)	State avg. length (in.)	Weighted mean len. (in.)	Weighted age freq.	Mean growth index*
Northern pike						-0.9
Age III:	12	17.2-24	20.8	19.95	52.00%	
Age IV:	3	19.8-24.2	23.4	22.20	12.00%	
Age V:	4	26.8-33.2	25.5	30.63	14.00%	
Age VI:	1	26.1-26.1	27.3	26.10	2.00%	
Age VIII:	2	33.7-33.8	31.2	33.75	8.00%	
Rock bass						+0.6
Age II:	1	5.2-5.2	3.9	5.20	3.13%	
Age III:	8	5.1-6.2	5.1	5.46	26.34%	
Age IV:	13	6-7.7	6.1	6.92	51.40%	
Age V:	2	7.3-8.9	6.9	8.05	6.64%	
Age VI:	1	10.3-10.3	7.8	10.30	3.13%	
Age VII:	2	10.3-10.5	8.6	10.40	6.25%	
Age IX:	1	10.5-10.5	9.8	10.50	3.13%	
Yellow Perch						
Age III:	2	6-6	6.5	6.00	50.00%	
Age IV:	1	6.8-6.8	7.5	6.80	25.00%	
Age IX:	1	12.2-12.2	11.6	12.20	25.00%	

Species	Inch group	Age class	No. aged	Avg. length (in.)	Pct. of inch group
Black crappie	6	III	3	6.50	50.00
Black crappie	6	IV	3	6.63	50.00
Black crappie	7	IV	9	7.38	81.82
Black crappie	7	V	2	7.85	18.18
Black crappie	8	IV	5	8.40	50.00
Black crappie	8	V	5	8.28	50.00
Black crappie	9	IV	3	9.33	33.33
Black crappie	9	V	5	9.30	55.56
Black crappie	9	VI	1	9.40	11.11
Black crappie	10	V	2	10.45	50.00
Black crappie	10	VI	2	10.15	50.00
Black crappie	11	V	2	11.40	100.00
(samples from 6.1-11.8 in.) Totals:			42		
Bluegill	4	III	1	4.30	100.00
Bluegill	5	V	12	5.58	100.00
Bluegill	6	V	1	6.30	10.00
Bluegill	6	VI	2	6.70	20.00
Bluegill	6	VII	6	6.57	60.00
Bluegill	6	VIII	1	6.20	10.00
Bluegill	7	V	2	7.05	15.38
Bluegill	7	VI	1	7.10	7.69
Bluegill	7	VII	6	7.75	46.15
Bluegill	7	VIII	3	7.50	23.08
Bluegill	7	IX	1	7.60	7.69

* Mean growth index is the average deviation from the state average length at age.



Species	Inch group	Age class	No. aged	Avg. length (in.)	Pct. of inch group
Bluegill	8	VII	1	8.00	12.50
Bluegill	8	VIII	4	8.35	50.00
Bluegill	8	IX	3	8.20	37.50
Bluegill	9	VIII	1	9.00	25.00
Bluegill	9	IX	3	9.00	75.00
(samples from 4-3-9 in.) Totals:			48		
Largemouth bass	7	II	1	7.90	100.00
Largemouth bass	8	II	2	8.10	33.33
Largemouth bass	8	III	1	8.40	16.67
Largemouth bass	8	IV	3	8.63	50.00
Largemouth bass	9	III	1	9.20	20.00
Largemouth bass	9	IV	4	9.58	80.00
Largemouth bass	10	IV	2	10.05	50.00
Largemouth bass	10	V	2	10.25	50.00
Largemouth bass	11	V	2	11.10	66.67
Largemouth bass	11	VI	1	11.30	33.33
Largemouth bass	12	V	1	12.50	50.00
Largemouth bass	12	VI	1	12.10	50.00
Largemouth bass	13	VI	3	13.57	100.00
Largemouth bass	14	VI	1	14.70	50.00
Largemouth bass	14	VII	1	14.80	50.00
Largemouth bass	15	VII	1	15.60	50.00
Largemouth bass	15	IX	1	15.60	50.00
Largemouth bass	17	VIII	1	17.10	100.00
(samples from 7-9-17-1 in.) Totals:			29		
Northern pike	11	I	1	11.20	100.00
Northern pike	14	II	2	14.15	100.00
Northern pike	17	III	3	17.50	100.00
Northern pike	18	III	3	18.53	100.00
Northern pike	19	IV	1	19.80	100.00
Northern pike	20	III	2	20.40	100.00
Northern pike	21	III	2	21.40	100.00
Northern pike	22	IV	1	22.60	100.00
Northern pike	23	III	1	23.20	100.00
Northern pike	24	III	1	24.00	50.00
Northern pike	24	IV	1	24.20	50.00
Northern pike	26	V	1	26.80	50.00
Northern pike	26	VI	1	26.10	50.00
Northern pike	29	V	1	29.90	100.00
Northern pike	30	V	1	30.70	100.00
Northern pike	33	V	1	33.20	33.33
Northern pike	33	VIII	2	33.75	66.67
(samples from 11-2-33-8 in.) Totals:			25		
Rock bass	5	II	1	5.20	12.50
Rock bass	5	III	7	5.31	87.50

* Mean growth index is the average deviation from the state average length at age.



Species	Inch group	Age class	No. aged	Avg. length (in.)	Pct. of inch group
Rock bass	6	III	1	6.20	14.29
Rock bass	6	IV	6	6.58	85.71
Rock bass	7	IV	7	7.29	87.50
Rock bass	7	V	1	7.30	12.50
Rock bass	8	V	1	8.90	100.00
Rock bass	10	VI	1	10.30	25.00
Rock bass	10	VII	2	10.40	50.00
Rock bass	10	IX	1	10.50	25.00
(samples from 5.1-10.5 in.) Totals			28		
Yellow Perch	6	III	2	6.00	66.67
Yellow Perch	6	IV	1	6.80	33.33
Yellow Perch	12	IX	1	12.20	100.00
(samples from 6-12.2 in.) Totals			4		

* Mean growth index is the average deviation from the state average length at age.



Water: Idlewild Lake

Discharge county: Lake

Survey begin: 05/16/2006

end: 08/29/2006

T/R/S: 17N 12W 05

Survey type: Inland Lake

Status: Field Work Completed

Primary purpose: Status & Trends

Note: Random Status and Trends survey of general fish population. Size medium.

Gear: No. used	Gear	Common name
1	Boom Shocker	18 KD Boomshocker
1	EGill In HAR-11	EGill In HAR-11
1	EGill In HAR-17	EGill In HAR-17
1	Fyke LM HAR-07	Fyke LM HAR-07
	Limnology	
1	Minnow Seine	Status & Trends minnow seine
	Other	
1	Trap Net	Trap Net HAR - 12
		Trap Net HAR - 10
		Trap Net HAR-11
		Trap Net HAR - 09

Species / Age	No. aged	Length range (in.)	State avg. length (in.)	Weighted mean len. (in.)	Weighted age freq.	Mean growth index*
Bluegill						1.7
Age II:	7	3-4.2	4.7	3.33	33.95%	
Age III:	13	3.4-4.5	5.8	3.80	58.31%	
Age IV:	2	4.5-4.7	6.6	4.60	7.74%	
Largemouth bass						1.5
Age I:	12	4.2-5.7	6.9	4.92	25.00%	
Age II:	8	6.2-9.1	9.3	8.04	36.46%	
Age III:	1	9.4-9.4	11.2	9.40	7.29%	
Age IV:	1	11.6-11.6	12.7	11.60	4.17%	
Age V:	2	11.7-12.5	14.4	12.10	8.33%	
Age VI:	3	11.5-15.8	16.0	13.71	14.58%	
Age IX:	1	17.3-17.3	19.1	17.30	4.17%	
Northern pike						
Age 0:	1	8.5-8.5		8.50	100.00%	
Rock bass						
Age II:	1	4.3-4.3	4.8	4.30	4.55%	
Age III:	2	4.4-6.6	5.9	6.09	19.70%	
Age IV:	4	4.8-7.1	6.7	6.70	75.76%	
Yellow Perch						1.5
Age I:	16	3.1-4.3	5.0	3.55	89.66%	
Age II:	3	4-4.6	6.3	4.30	10.34%	

Species	Inch group	Age class	No. aged	Avg. length (in.)	Pct. of inch group
Bluegill	3	II	6	3.22	46.15

* Mean growth index is the average deviation from the state average length at age.



Species	Inch group	Age class	No. aged	Avg. length (in.)	Pct. of inch group
Bluegill	3	III	7	3.57	53.85
Bluegill	4	II	1	4.20	11.11
Bluegill	4	III	6	4.15	66.67
Bluegill	4	IV	2	4.60	22.22
(samples from 3-4.7 in.) Totals:			22		
Largemouth bass	4	I	6	4.53	100.00
Largemouth bass	5	I	6	5.30	100.00
Largemouth bass	6	II	4	6.48	100.00
Largemouth bass	7	II	1	7.50	100.00
Largemouth bass	8	II	2	8.50	100.00
Largemouth bass	9	II	1	9.10	50.00
Largemouth bass	9	III	1	9.40	50.00
Largemouth bass	11	IV	1	11.60	33.33
Largemouth bass	11	V	1	11.70	33.33
Largemouth bass	11	VI	1	11.50	33.33
Largemouth bass	12	V	1	12.50	50.00
Largemouth bass	12	VI	1	12.80	50.00
Largemouth bass	15	VI	1	15.80	100.00
Largemouth bass	17	IX	1	17.30	100.00
(samples from 4.2-17.3 in.) Totals:			28		
Northern pike	8	0	1	8.50	100.00
(samples from 8.5-8.5 in.) Totals:			1		
Rock bass	4	II	1	4.30	33.33
Rock bass	4	III	1	4.40	33.33
Rock bass	4	IV	1	4.80	33.33
Rock bass	6	III	1	6.60	33.33
Rock bass	6	IV	2	6.45	66.67
Rock bass	7	IV	1	7.10	100.00
(samples from 4.3-7.1 in.) Totals:			7		
Yellow Perch	3	I	11	3.41	100.00
Yellow Perch	4	I	5	4.16	62.50
Yellow Perch	4	II	3	4.30	37.50
(samples from 3.1-4.6 in.) Totals:			19		

* Mean growth index is the average deviation from the state average length at age.



Water: Idlewild Lake

Discharge county: Lake

Survey begin: 05/16/2006 end: 08/29/2006

T/R/S: 17N 12W 05

Survey type: Inland Lake

Status: Field Work Completed

Primary purpose: Status & Trends

Note: Random Status and Trends survey of general fish population. Size medium.

Effort begin: 08/14/2006 00:00

end: 08/14/2006 00:00

Area covered: 105 acres.

TRS: 17N 12W Sec. 5,6,7,8

Location: See coordinates. Samples were taken according to S&T protocol in various locations.

Temp/oxygen profile is under tab.

Water color: Clear

Clarity: Clear

Level: Normal

Weather present: Overcast

preceding: Partly cloudy

Cover: See habitat sampling tab.

Lake Profile									
Basin #	Latitude	Longitude	Total depth (ft.)	Critical depth (ft.)	Thermocline (ft.)	Secchi depth (ft.)	2X Secchi depth (ft.)	Alkalinity	Nutrients sample
1	43.894300	85.781820	20.50		20.0	9.00	18.00	Y	Y

Zooplankton Samples	Basin #	Sample no.	Latitude	Longitude	Sample depth	Gear
	1	1	43.893880	85.780460	14ft	S&T protocol.
		2	43.893480	85.781800	14ft.	S&T protocol.
		3	43.895160	85.781270	14ft.	S&T protocol.
		4	43.894670	85.782380	14ft.	S&T protocol.

Shoreline Sampling										
Sample date	Segment no.	Start latitude	Start longitude	Small docks	Large docks	No. of dwellings	% Shoreln. armored	Subm. trees	End latitude	End longitude
08/14/2006	1	43.895300	85.783180	3	0	6	0	1		
	2	43.894860	85.780160	8	0	12	0	2		
	3	43.893470	85.782130	2	0	7	0	9		
	4	43.892000	85.784550	8	0	11	20	0		
	5	43.890440	85.781340	3	0	6	0	1		
	6	43.888940	85.778640	1	0	4	0	5		
	7	43.888660	85.776760	4	0	8	0	5		
	8	43.888230	85.777950	4	0	11	0	2		
	9	43.888970	85.781310	0	0	2	0	2		
	10	43.888320	85.783000	5	0	8	10	0		
	11	43.886150	85.784040	5	0	8	20	1		
	12	43.883460	85.783510	5	0	12	0	4		
	13	43.883030	85.783230	10	0	11	0	2		
	14	43.884390	85.786240	3	0	11	0	0		



Shoreline Sampling										
Sample date	Segment no.	Start latitude	Start longitude	Small docks	Large docks	No. of dwellings	% Shoreln. armored	Subm. trees	End latitude	End longitude
08/14/2006	15	43.886890	85.785100	2	0	12	0	2		
	16	43.889750	85.784820	7	0	13	50	3		
	17	43.892640	85.785180	5	1	12	0	4		
	18	43.894720	85.782940	1	0	1	0	0		

Notes

Limnology samples taken on 8/14/06. Alkalinity sample = 392.
GPS coordinates for PAS 43.89530, 85.78318.



Water: Idlewild Lake

Discharge county: Lake

Surface acres: 105

Max. depth:

Discharge T/R/S: 17N 12W 05

Effort begin: 08/14/2006 00:00:00

End: 08/14/2006 00:00:00

Collection site no.:

Index site no.:

Site T/R/S: 17N 12W Sec. 5,6,7,8

Location: See coordinates. Samples were taken according to S&T protocol in various locations.
Temp/oxygen profile is under tab.

Vegetation:

Cover: See habitat sampling tab.

Weather: Overcast

Preceding: Partly cloudy

Depth range:

Temp. range:

Temp. stratified: Yes

Water color: Clear

Water level: Normal

Water clarity: Clear

Secchi depth: 9 ft.

Wave condition: Calm

Bottom type:

Temperatures				
Date/time	Reading depth	Temperature	Oxygen	pH
08/14/2006 00:00:00	0'	77.50	9.73	
08/14/2006 00:00:00	2'	77.61	9.59	
08/14/2006 00:00:00	4'	77.61	9.52	
08/14/2006 00:00:00	6'	77.61	9.45	
08/14/2006 00:00:00	8'	77.61	9.40	
08/14/2006 00:00:00	10'	77.58	9.36	
08/14/2006 00:00:00	12'	77.36	9.25	
08/14/2006 00:00:00	14'	77.03	9.13	
08/14/2006 00:00:00	16'	75.60	11.80	
08/14/2006 00:00:00	18'	67.38	9.44	
08/14/2006 00:00:00	20'	65.41	4.43	



Water: Idlewild Lake

Discharge county: Lake

Survey begin: 05/16/2006

end: 08/29/2006

T/R/S: 17N 12W 05

Survey type: Inland Lake

Status: Field Work Completed

Primary purpose: Status & Trends

Note: Random Status and Trends survey of general fish population. Size medium.

Field notes

5/15 Askam and Kerry set 4 TN, 1 FN, and 2 Exp IGNS randomly around the lake. Observed some panfish and bass along the shoreline. Some active bass beds, no sign of panfish spawning. Overcast day with some periods of sun. Air temperature 60F, water temperature 59.3F. Reports that lake was treated for milfoil last summer.

5/16 Askam, Kerry, and Heintzelman pulled nets and processed fish. Gill nets fished poorly they were reset in the same location but slightly deeper. TN's and FN fish decent with good numbers of bluegill and some crappie. Bluegill catch was impressive with most fish between 7 to 9 inches. FN was moved to shallow bay and TN's were reset in same location. Conditions started overcast and became sunny, air temperature 63F, water temperature 59F. Observed minnows along shore and numerous wigglers burrows along bottom. Spoke to several lake assoc. members, Mark Thomas and Julia Caar would like survey reports.

5/17 Askam, Heintzelman, and Tonello pulled nets and processed fish. Gill nets continued to fish poorly with a few pike captured. Moved both gill nets and reset in deeper water. TNs and FN continued to catch panfish and bass, as well as, some legal pike. Bluegill catch may have dropped slightly, however bass and crappie numbers improved. Conditions were partly sunny and calm and turned to overcast and rain. Air temperature 65F, water temperature 60F. Observed a loon on the lake.

8/14 Askam, Kerry collected lake limnology samples. Weather was overcast turning to partly sunny.

8/29 CLMMU collected boom shocker and seining samples. Three sections were shocked and four locations were seined. Abundant YOY panfish were captured, as well as bass, yellow perch, and various minnow species. Conditions were clear and calm. Air temperature was 75F, air temperature 77F.

5/18 Askam, Kerry, and Vaas pulled and processed fish. Overall catch began to decreased in all nets. Some nice pike were captured in TNs. Gill nets continued to fish poorly. Conditions were overcast with showers, a cold front had moved in. Air temperature 45F, water temperature 58F. All nets were removed. Neutral safety switch went out on the outboard, Vaas was able make field repairs to save the day.

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PARKS AND RECREATION



STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
FISHERIES DIVISION

MARK TONELLO
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